

Chapter Ten: The Rock and Fossil Record

Section 3: Looking at Fossils

Fossil: naturally preserved evidence of life

- Where can you find fossils:
 - Find in rocks...soft parts decompose leaving behind the hard parts
 - **Permineralization:** process in which minerals fill in pore spaces of an organism's tissues
 - **Petrification:** when the organism's tissues are completely replaced by minerals
 - *Amber:* hardened tree sap
 - *Mummification:* when an organism dries quickly (like in a desert) and the soft part of its body doesn't decay
 - Frozen fossils...animals get trapped in glaciers
 - Fossils in tar

Trace fossil: any naturally preserved evidence of an animal's activity

- Examples
 - Tracks
 - Burrows...shelters made by animals that dig into the ground
 - **Coprolites:** preserved feces, or dung, from animals

Mold: cavity in the ground or rock where a plant or animal was buried

Cast: object created when sediment fills a mold and becomes rock

Scientists use fossils to interpret the past:

- Changes in environment
 - Example: Iowa was once covered in ocean
- Changes in life
 - Fish → amphibians → reptiles